



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/594,290

05/07/2007

Katsuya Takigawa

AK-525XX

6319

207 7590 08/14/2009  
WEINGARTEN, SCHURGIN, GAGNEBIN & LEOVICI LLP  
TEN POST OFFICE SQUARE  
BOSTON, MA 02109

EXAMINER

WEISS, PAMELA HL

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

08/14/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



### DETAILED ACTION

1. Applicant's arguments with respect to claims 1, 7-8 and 10-14 have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment of the claims of June 19, 2009.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Baba (WO 02/092735A1).

### Regarding Claims 1 and 10

Baba discloses a lubricating composition for hydraulic working oils, gear wheel oils, compressor oils, turbine oils and bearing oils (P22 L18-23) comprising a petroleum based lubricating oil or a synthetic hydrocarbon based base oil (P5 L13-15 and L33-35 and P6 L5-9) and further comprising:

Component A(1) in the form of a  $\beta$ -dithiophosphorylpropionic acid (P3 L20-25) and Component A(2) as a triaryl phosphorothioate (P4 L1-6). Baba discloses the aforementioned additives may be used together. (P4 L26-30).

Baba discloses the composition further comprises Component (B) a viscosity index agent such as polymethacrylate (P14 L12-14).

Baba discloses the composition may further comprise component (C-2) of behenic acid  $C_{22}H_{44}O_2$  (P6 L29 which meets the limitation for an alkyl group having 7 to 29 carbon atoms).

Baba also discloses N-Oleoyl sarcosinic acid (P20 Table 3) and sarcosines and their derivatives (P6 L18-22) meeting the limitation of C-1-1 (the examiner notes that the instant application specification identifies n-oleoyl sarcosine as component C-1-1 at P145 and sarcosine at Table 1 p115) further meeting the limitation of claims 10 and 14.

Baba discloses the composition comprising A(1), A(2), B, and (C-2) thereby meeting the limitations of claim 1 for A(1), A(2) and at least one of B, C or D.

Baba discloses the composition comprising A(1), A(2), B, and (C-2) thereby meeting the limitations of claim 10 for (C) and at least one of (A), (B) or (D).

A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Thus, the language stating that the lubricating oil composition is for industrial machinery equipment is not afforded patentable weight.

***Claim Rejections - 35 USC § 102/§103***

4. Claims 13 and 14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Baba (WO 02/092735A1).

Regarding Claims 13 and 14:

The rejection to claims 1 and 10 above are expressly incorporated herein. Baba discloses the limitations set forth above.

Baba also discloses N-Oleyl sarcosinic acid (P20 Table 3) and sarcosines and their derivatives (P6 L18-22) meeting the limitation of C-1-1 (the examiner notes that the instant application specification identifies n-oleoyl sarcosine as component C-1-1 at P145 and sarcosine at Table 1 p115) further meeting the limitation of claims 10-12 and 14.

Baba discloses the composition consisting essentially of A(1), A(2), B, and (C-2) thereby meeting the limitations of claim 13 for synthetic oils and component A(1) and A(2).

Baba discloses the composition consisting essentially of A(1), A(2), B, and (C-2) thereby meeting the limitations of claim 14 for synthetic oil and component (C)

The transitional phrase “consisting essentially of” limits the scope of a claim to the specified materials or steps “and those that do not materially affect the basic and novel characteristic(s)” of the claimed invention. *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976) (emphasis in original)

A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body

Art Unit: 1797

of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hira*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Thus, the language stating that the lubricating oil composition is for industrial machinery equipment is not afforded patentable weight.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

Art Unit: 1797

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 7-8, and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baba (WO 02/092735A1) as applied to claims 1 and 10 above further in view of Yokota et al. (US 2002/0035043A1)

Regarding Claims 7-8 and 11-12

Baba discloses the limitations set forth above. Rejection to claims 1 and 10 set forth in paragraph 3 above are expressly incorporated herein.

Baba also discloses N-Oleoyl sarcosinic acid (P20 Table 3) and sarcosines and their derivatives (P6 L18-22) meeting the limitation of C-1-1 (the examiner notes that the instant application specification identifies n-oleoyl sarcosine as component C-1-1 at P145 and sarcosine at Table 1 p115) further meeting the limitation of claims 11-12.

Baba discloses that in addition to the aforementioned components, suitable amounts of supplementary additives of the various types which are generally used can be added to the composition. (P9 L8-14) Baba discloses the oil may be petroleum based and synthetic based or mixtures thereof. (P6 L5-9)

Baba discloses the composition may comprise partial esters of monocarboxylic acids.

Baba does not expressly disclose the composition including component (D) an ester of a polyhydric alcohol and a fatty acid of monobasic acid selected from (D-1) to (D-3).

Yokota et al. discloses a lubricating composition for industrial machinery and equipment (cutting and grinding [0010 and 0011]), said composition comprising a base oil selected from mineral oils, fats and oils, synthetic oils and mixtures of two or more of them ( [0011] an ester base oil), and at least one additive component (D) :

Yokota et al. also discloses the lubricating oil composition comprising the additive comprises the ester oiliness improver of said component (D) which is an ester of a polyhydric alcohol and a fatty acid of monobasic acids. ([0045] and [0065]).

Yokota et al. discloses that there is no limitation on the combination of alcohols and carboxylic acids ([0067-0074]) Yokota et al. further discloses the oiliness improver may be a full ester or a partial ester ([0075])

Yakota et al. discloses a polyhydric alcohols ([0017] including Sorbitan), monobasic acids ([0021]) and polybasic acids ([0022]). Yakota also discloses that the ester may be any combination of alcohols and acids ([0067]) and may result in partial or full esters when using a polyhydric alcohol ([0073]). the esters of (D-1) to (D-3) would intrinsically result from the possible combinations of alcohols and acids of Yakota thereby meeting the claim limitations:

(D-1): an ester of a polyhydric alcohol and an unsaturated fatty acid containing a partial ester with the degree of esterification of 1 and a partial ester with the degree of esterification of 2 or more;

(D-2) : a whole ester of a polyhydric alcohol and a mixture of fatty acids, wherein the fatty acids are short-chained fatty acids and long-chained fatty acids; and



(D-3) : an ester of a polyhydric alcohol ([0071]) and a branched saturated fatty acid ([0047] wherein the acid may be a branched saturated carboxylic acid) containing a partial ester with the degree of esterification of 1 and a partial ester with the degree of esterification of 2 or more.

Yokota discloses the ester provides lubrication in a minimal quantity lubrication system. ([0010]) Yokota discloses the composition may further comprise a base oil and additives ([0082]) such as corrosion inhibitors, polyacrylates, extreme pressure additives, etc. ([0084]).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to add the ester of Yokota to the composition of Baba since Baba permits additional additives and expressly contemplate the use of a partial ester; further, doing so would improve the lubricating properties of the oil of Baba.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1-2, 7-8, and 10-14 have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1797

11. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAMELA WEISS whose telephone number is (571)270-7057. The examiner can normally be reached on Mon.-Thur. 8:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1797

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PW

/Glenn A Caldarola/  
Acting SPE of Art Unit 1797